

Abstract

A method and apparatus for accessing the pericardial space which provides for stable short term or long term placement of a delivery catheter or cannula having its distal most end located in the pericardial space. The catheter or cannula may be introduced into the pericardial space either transvenously through the wall of a heart chamber or transthoracically by penetrating the chest wall and the pericardium. Some embodiments are provided with a mechanism for stabilizing the distal end of the catheter or cannula, which mechanism may employ an extensible elastic, generally tubular member located at the distal end of the catheter or cannula. The device may be provided with a mechanism for extending the tubular member longitudinally, causing its diameter to diminish substantially. The tubular member may be passed through the wall of the heart or the pericardium in its extended configuration and thereafter, the distal-most portion of the tubular member may be moved proximally, causing its diameter enlarge, anchoring the distal end of the catheter or cannula to the pericardium or to the wall of a heart chamber. In these embodiments, the device is preferably provided with a shoulder or flange located proximal to the extendible tubular member, for location on the opposite side of the heart wall or pericardium from the distal end of the catheter or cannula.